# Alberta Health

## Primary Care Network (PCN) Profiles

# Bow Valley Primary Care Network

Version 1, September 2015

Alberta Government

# Table of Contents

**Introduction** ..... i

**Primary Care Network (PCN) Information** ..... 1

**Provincial Map of GP Services for the Primary Care Network** ..... 2

**Local Focused Map of Select GP Services for the Primary Care Network** ..... 3

**Demographics** ..... 4

Table 1.1 Distribution of PCN Panel Population by Age and Gender as at March 31, 2014 ..... 4

Figure 1.1 Percentage Distribution of the PCN Panel versus All Alberta PCNs Population by Age Groups as at March 31, 2014 ..... 4

Figure 1.2 Primary Care Network Panel Population as at End of Fiscal Years 2010 – 2014 ..... 5

**Socio-Economic Indicators** ..... 6

Table 2.1 Population Percentage of First Nations with Treaty Status and Inuit as at March 31, 2014 .. 6

**Chronic Disease Prevalence** ..... 7

Figure 3.1 PCN Panel Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2009/2010 – 2013/2014 (Chronic Obstructive Pulmonary Disease, Diabetes, Hypertension, Ischemic Heart Disease) ..... 7

Figure 3.2 PCN Panel versus Alberta PCNs Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2013/2014 (Chronic Obstructive Pulmonary Disease, Diabetes, Hypertension, Ischemic Heart Disease) ..... 8

**Maternal and Child Health** ..... 9

Table 4.1 PCN Panel Maternal and Child Health Indicators for Three-Year Period (Number of Births, Percent of Low/High Birth Weight, Birth Rate, Fertility Rate, Teen Birth Rate, Percent Maternal Prenatal Smoking) ..... 9

**Inpatient Service Utilization** ..... 10

Table 5.1 Inpatient Separation Rates (per 1,000 population) for the PCN Panel versus Alberta PCNs Panel, Fiscal Years 2011/2012 – 2013/2014 ..... 10

Figure 5.1 PCN Panel Age-Standardized Inpatient Separation (IP Sep) Rates (per 100,000 population) for Selected Conditions, 2009/2010 – 2013/2014 (Asthma, Diabetes, Influenza, Ischemic Heart Diseases, Mental and Behavioural Disorders due to Psychoactive Substance Use, Pneumonia, Pulmonary Heart and Pulmonary Circulation Diseases) ..... 10

Figure 5.2 PCN Panel versus Alberta PCNs Age-Standardized IP Sep Rates (per 100,000 population), for Selected Conditions, 2013/2014 (Asthma, Diabetes, Influenza, Ischemic Heart Diseases, Mental and Behavioural Disorders due to Psychoactive Substance Use, Pneumonia, Pulmonary Heart and Pulmonary Circulation Diseases) ..... 11

© 2015 Government of Alberta

**Appendix A – Definitions** ..... 12

**Appendix B – PCN Panel Distribution by Municipality (Top 30)** ..... 16

### *Note:*

*Qualifiers such as 'higher than', 'much lower than', 'similar to' etc. are used throughout the PCN profile to compare Primary Care Network (PCN) indicator values to the provincial PCN panel average. Note that the qualifiers 'similar' and 'comparable' are chosen to describe situations in which the PCN indicator value is either identical or very close to the provincial PCN average. For further details on these qualifiers please refer to Appendix A.*

### *Sugested Citation:*

*Alberta Health Primary Health Care – Primary Care Network (PCN) Profiles: [insert PCN name], Version 1, September 2015*

© 2015 Government of Alberta

## INTRODUCTION

The Government of Alberta is currently working to improve primary health care within the province. The Primary Health Care Strategy has three strategic directions: enhancing the delivery of care, cultural change, and building blocks for change. Primary health care services in Alberta are delivered in a variety of settings and by a range of providers. Current primary health care models in Alberta include: primary care networks, stand-alone physician clinics, community health centres, urgent-care centres, community ambulatory care centres, medicentres, and university health centres. Primary Care Networks (PCNs) provide an entry point into the health care system and link individuals to medical services and social and community supports.

To assist the PCNs with primary health care planning, Alberta Health has developed a series of reports to provide a broad range of demographic, socio-economic and population health statistics considered relevant to primary health care for communities across the province. There are 42 PCNs across the province and the Alberta Health "PCN Profile" reports provide information for each of the 42 PCNs in Alberta.

The PCN Profiles (Profiles) are intended to highlight areas of need and provide relevant information to support the consistent and sustainable planning of primary health care services. Each Profile offers an overview of the current health status of paneled patient in the PCN, indicators of the PCN's current and future health needs, and evidence as to which quality services are needed on a timely and efficient basis to address the PCN's needs.

Each report includes sections that present panel level information. In addition, the Profile includes Appendices containing definitions and the PCN panel patients' geographic distribution by Municipality.

For more information contact ***primaryhealthcare@gov.ab.ca***

© 2015 Government of Alberta

***Note:***
*Various data sources are used to compile the PCN Profiles. The Profiles are developed through the collaboration of Primary Health Care, Health Analytics in Alberta Health and Alberta Health Services.*

**Contributors:**

**Jennifer Bian,** *Health Analytics, Alberta Health*
**Katherine Lyman**, *Health Analytics, Alberta Health*
**Dan Metes**, *Health Analytics, Alberta Health*
**Mengzhe Wang**, *Health Analytics, Alberta Health*
**Ade A Davies,** *Primary Health Care, Alberta Health*
**Candy Gregory,** *Primary Health Care, Alberta Health*

**Nicola Brooks**, *Alberta Health Services*
**Nana Gyennin**, *Alberta Health Services*
**Judith Krajnak**, *Alberta Health Services*
**Caroline McAuley**, *Alberta Health Services*
**Judy Seidel**, *Alberta Health Services*

**Erik Ellehoj**, *Geographer*

© 2015 Government of Alberta

# Primary Care Network (PCN) Information

*This section contains information (demographics, First Nations/Inuit population proportion, maternal and child health rates, chronic disease prevalence, and inpatient service utilization) presented at both the individual PCN Panel and the Provincial PCN Panel. As of 2013/2014 there are 42 active PCNs in Alberta. The population of these PCNs varies from very small (~4k) to very large (~360k).*

## *Map Descriptions:*

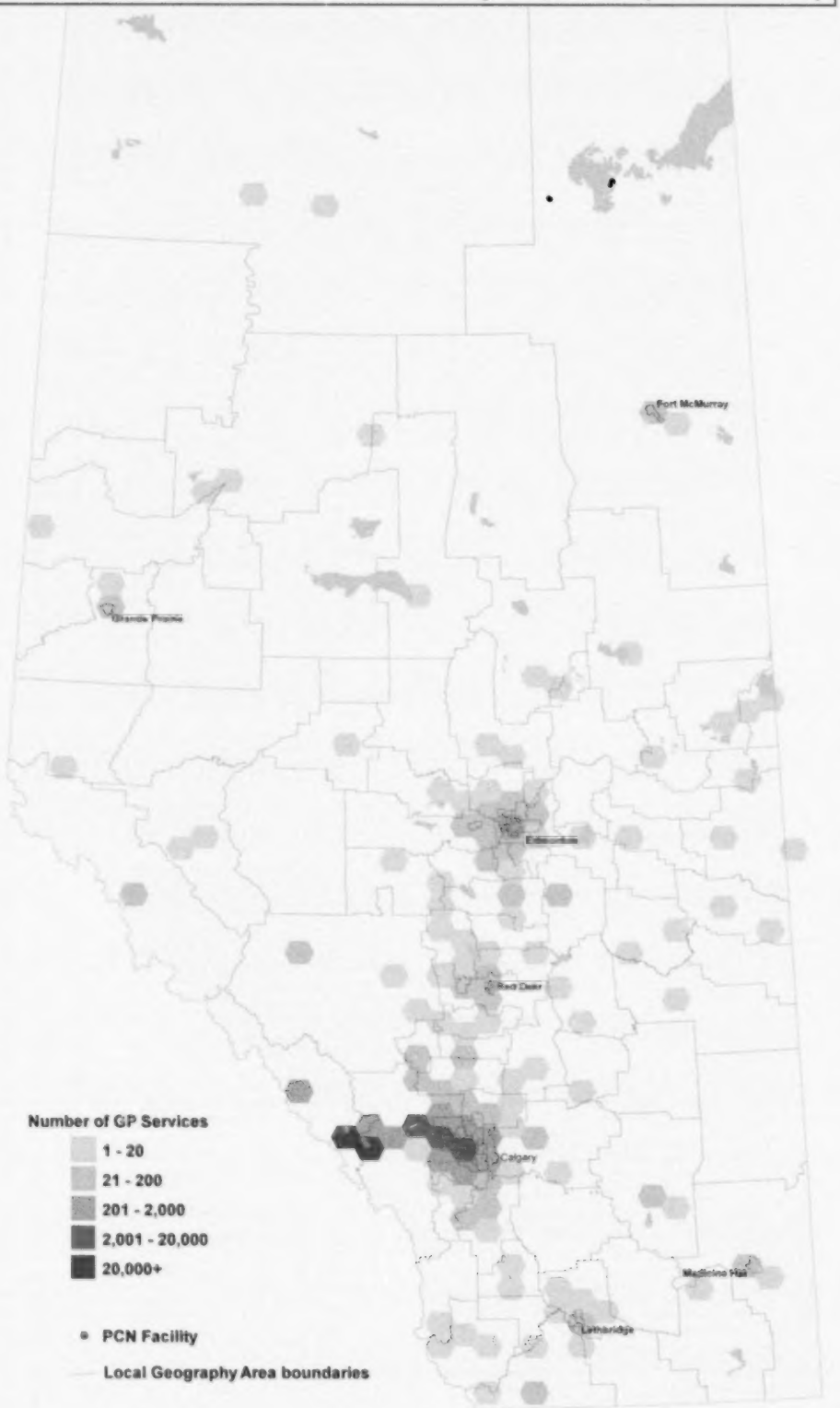
***The provincial view map** depicts the distribution of PCN panel patient GP services by postal code at the level of the whole province. The hexagons capture GP services to panel patients residing at all postal codes within the hexagon area.*

***The local view map** depicts the distribution of PCN panel patient GP services by postal code for the core service area near PCN facilities. The local view maps are calculated by drawing a 2 km circle around every postal code and aggregating the data for all postal codes that fall within each circle. In rural areas, the population of postal codes is aggregated to towns with post offices and therefore the circles represent the town and surrounding rural population together.*

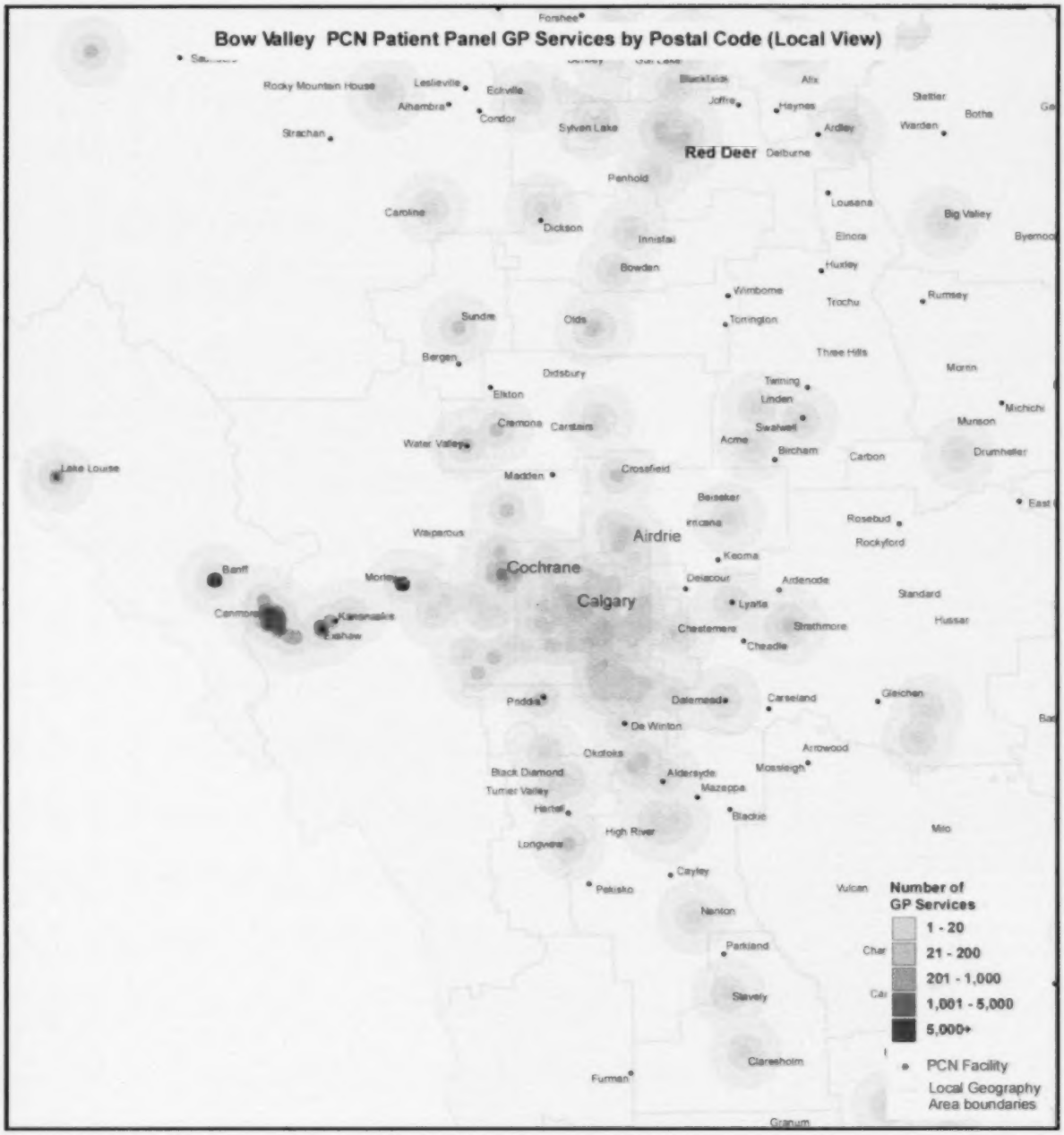
*In both maps, PCN facilities (only those where GP services from panel patients were reported during the report timeframe) are represented through red dots. The number of patient panel GP services is captured though shades of grey or blue, where intensity of services increases from light grey (lowest) and dark grey, to lighter blue and darker blue (highest). Local geographic area boundaries (132 Alberta subdivisions identical to the ones used in the Community Profiles: http://www.health.alberta.ca/services/PHC-community-profiles.html ) depicted with lines, municipality names (black text) and lakes (light blue) are also provided as reference features.*

© 2015 Government of Alberta

## Bow Valley PCN Patient Panel GP Services by Postal Code (Provincial View)




© 2015 Government of Alberta




© 2015 Government of Alberta

# Primary Care Network: Bow Valley Primary Care Network

## DEMOGRAPHICS

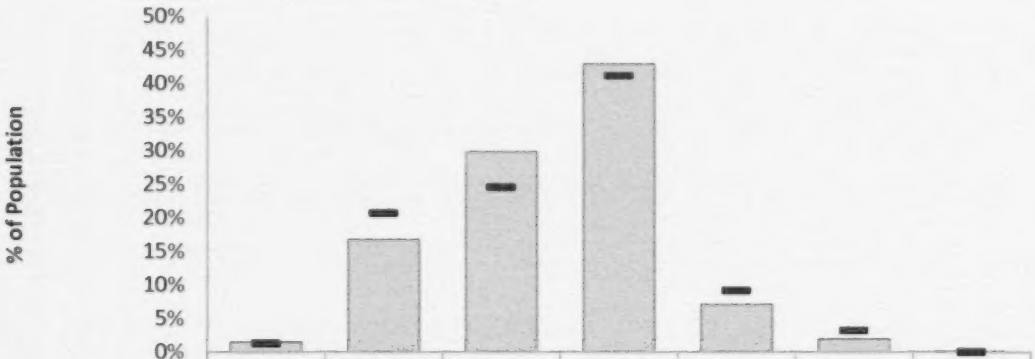
Table 1.1 shows the population distribution of the Primary Care Network (PCN) patient panel broken down by age group and gender, for the most recent fiscal year available. Specific age groups have been identified. Children under the age of one were defined as infants, while the pediatric age group includes all minors excluding infants. People with no age information available were categorized as unknown.

**TABLE 1.1** Distribution of PCN Panel[1] Population by Age and Gender
As at March 31, 2014

| Primary Care Network Panel Population | | | |
|---|---|---|---|
| **Age Group** | **Female** | **Male** | **Total** |
| Infants: Under 1 | 212 | 185 | 397 |
| Pediatric: 1-17 | 2,211 | 2,273 | 4,484 |
| 18-34 | 4,657 | 3,328 | 7,985 |
| 35-64 | 5,860 | 5,634 | 11,494 |
| 65-79 | 917 | 992 | 1,909 |
| 80 & Older | 310 | 216 | 526 |
| Unknown | 0 | 1 | 1 |
| **Total** | **14,167** | **12,629** | **26,796** |

Figure 1.1 profiles the panel population distribution by age group for both the PCN and all PCNs in Alberta, for the most recent fiscal year available.

**FIGURE 1.1** Percentage Distribution of the PCN Panel versus All Alberta PCNs Population
By Age Group as at March 31, 2014

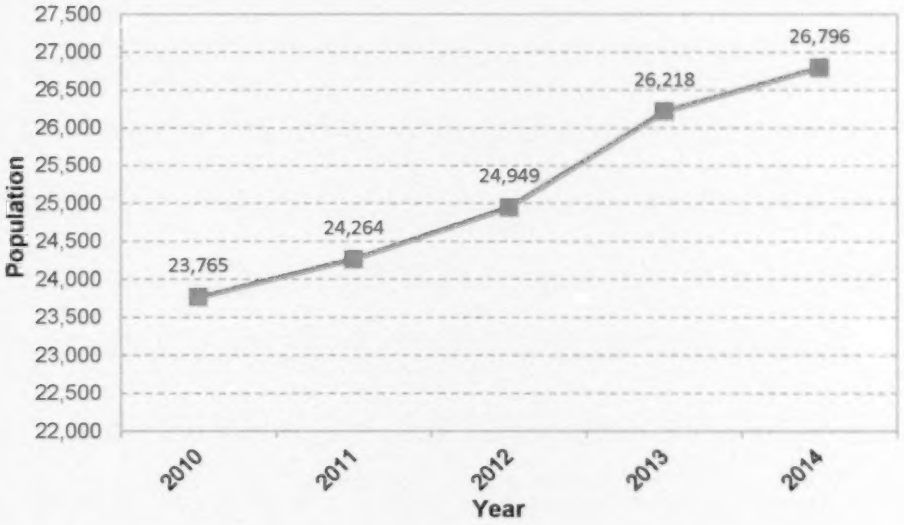



| | Infants: Under 1 | Pediatric: 1-17 | 18-34 | 35-64 | 65-79 | 80 & Older | Unknown |
|---|---|---|---|---|---|---|---|
| PCN | 1.5% | 16.7% | 29.8% | 42.9% | 7.1% | 2.0% | 0.0% |
| Alberta PCNs | 1.3% | 20.7% | 24.5% | 41.2% | 9.2% | 3.2% | 0.0% |

© 2015 Government of Alberta

The population counts for each year between 2010 and the most recent fiscal year are provided in Figure 1.2.

FIGURE 1.2 Primary Care Network Panel Population[2] Covered as at End (i.e. Mar 31) of Fiscal Years 2010 - 2014




The population of Bow Valley Primary Care Network increased by 12.8% between 2010 and 2014. A low of 23,765 individuals was reported in 2010 and a peak of 26,796 people was reported in 2014.

***Sources:***

*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health*
*Primary Care Network (PCN) Patient Panel File, Alberta Health*

***Notes:***

[1] *Patient panel derived based on four-cut methodology.*

[2] *Population might be missing during early years due to some PCNs being established later on. See Appendix A for details.*

© 2015 Government of Alberta

# Primary Care Network: Bow Valley Primary Care Network

## SOCIO-ECONOMIC INDICATORS

Tables 2.1 present information regarding First Nation and Inuit populations for both the PCN panel as well as all PCNs in Alberta. This information is presented as percentages.

**TABLE 2.1** Population Percentage of First Nations with Treaty Status[1] and Inuit as at March 31, 2014

| First Nations with Treaty Status and Inuit Population | | |
|---|---|---|
| | **Bow Valley Primary Care Network** | **Alberta PCNs** |
| Percent of Population that is First Nations or Inuit | 8.9% | 2.8% |

***Sources:***

*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry Files, Alberta Health*
*Primary Care Network (PCN) Patient Panel File, Alberta Health*

***Notes:***

[1] *See Appendix A for definition.*
[2] *Patient panel derived based on four-cut methodology. See Appendix A for details.*

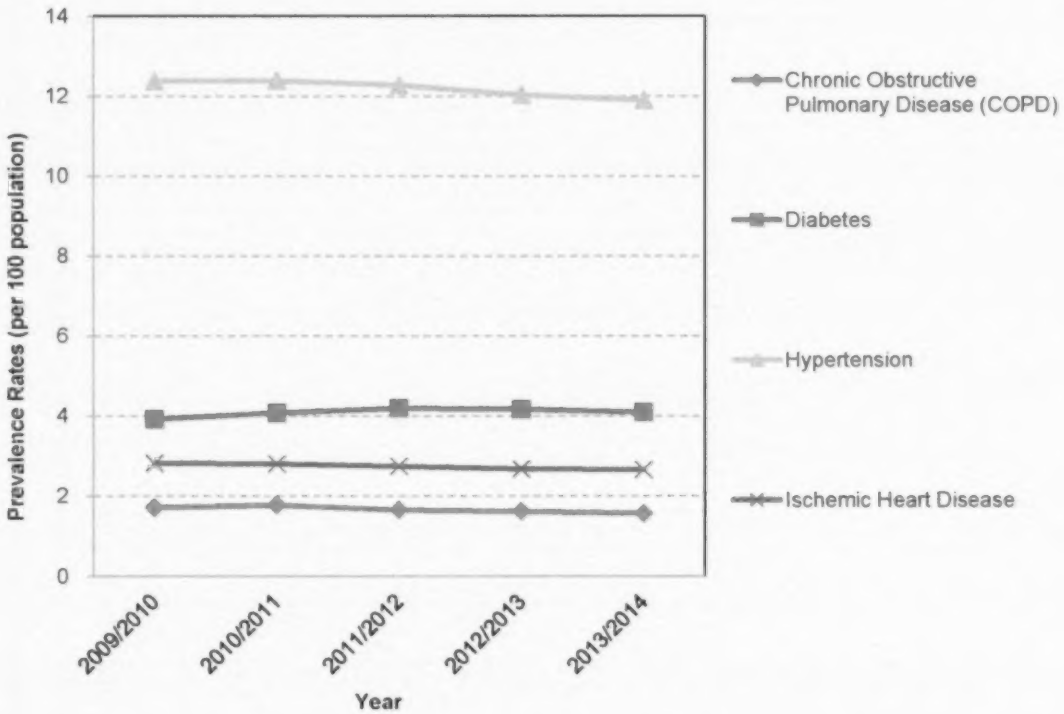
© 2015 Government of Alberta

# Primary Care Network: Bow Valley Primary Care Network

## CHRONIC DISEASE PREVALENCE

Figure 3.1 displays the rates per 100 population of the select chronic diseases in the PCN patient panel. The prevalence rates refer to the number of diagnosed individuals at a given time and have been standardized by age.

**FIGURE 3.1** PCN Panel Age-Standardized Chronic Disease Prevalence Rates[1,2,3] (per 100 population) 2009/2010 - 2013/2014

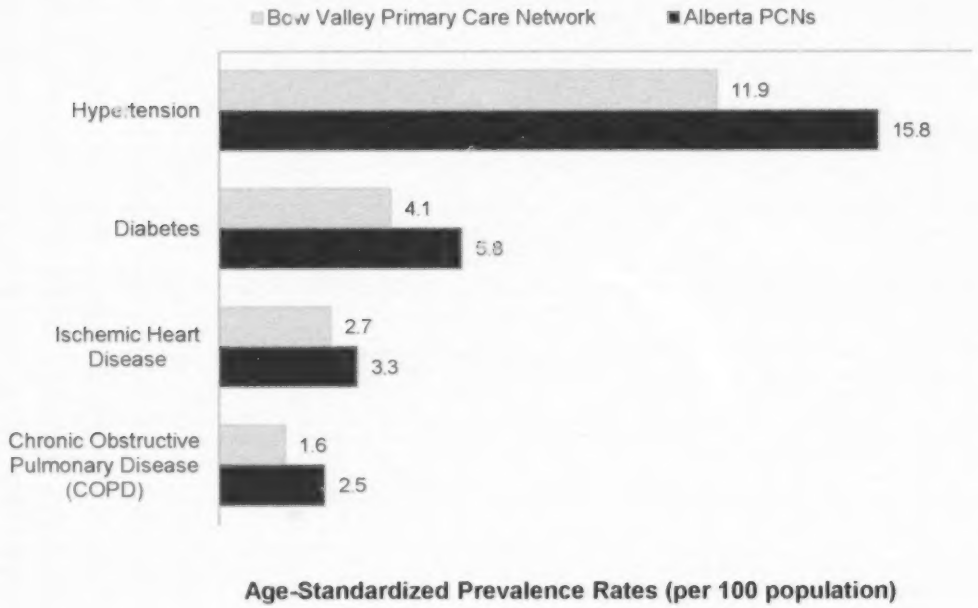



On average, the condition with the highest chronic disease prevalence rate reported for Bow Valley Primary Care Network during 2009/2010 to 2013/2014 was hypertension. In 2013/2014, Bow Valley Primary Care Network ranked number 42 in hypertension, number 42 in diabetes, number 41 in ischemic heart disease and number 42 in COPD among prevalence rates reported for the 42 Primary Care Networks (PCNs).

© 2015 Government of Alberta

Figure 3.2 depicts the 2013/2014 age-standardized prevalence rate for select major chronic diseases, per 100 population, for both the PCN panel and Alberta PCNs.

FIGURE 3.2 PCN Panel versus Alberta PCNs Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2013/2014




In 2013/2014, the Bow Valley Primary Care Network prevalence rate for hypertension per 100 population was 0.8 times lower than the corresponding rate reported for the provincial PCNs (11.9 vs. 15.8 AB PCNs). In addition, Bow Valley Primary Care Network showed prevalence rates higher than the provincial PCN rates for none of the 4 chronic diseases included above.

***Sources:***

*Alberta Health Care Insurance Plan (AHCIP) Physician Claims Data, Alberta Health*
*Alberta Health Care Insurance Plan (AHCIP) Quarterly Population Registry Files, Alberta Health*
*Alberta Hospital Discharge Abstract Database (DAD), Alberta Health*
*Primary Care Network (PCN) Patient Panel File, Alberta Health*
*Census 1991 Population Data, Statistics Canada*

***Notes:***

[1] *Age-standardized prevalence rates are adjusted using the direct method of standardization, with weights from Statistics Canada's 1991 census population.*

[2] *Patient panel derived based on four-cut methodology. See Appendix A for details.*

[3] *Population might be missing during early years due to some PCNs being established later on. See Appendix A for details.*

© 2015 Government of Alberta

# Primary Care Network: Bow Valley Primary Care Network

## MATERNAL AND CHILD HEALTH

Table 4.1 highlights maternal and child health indicators such as birth weight, fertility rate, teen birth rate and prenatal smoking for the PCN panel and Alberta PCNs. The indicator information is presented as rates, percentages, or raw numbers, depending on the indicator.

**TABLE 4.1** PCN Panel[2] Maternal and Child Health Indicators[3] for Three-Year Period

| Maternal and Child Health Indicators | Period | Bow Valley Primary Care Network | Alberta PCNs |
|---|---|---|---|
| Number of Births | 2009/2010 - 2011/2012 | 1,219 | 129,078 |
| Percent Low Birth Weights (of Live Births)[1], less than 2500 gm | | 7.5% | 6.7% |
| Percent High Birth Weights (of Live Births)[1], greater than 4000 gm | | 9.7% | 9.8% |
| Birth Rate (per 1,000 population)[1] | | 30.8 | 28.6 |
| Fertility Rate (per 1,000 Women 15 to 49 Years)[1] | | 51.4 | 56.5 |
| Teen Birth Rate (per 1,000 Women 15 to 19 Years) | | 31.2 | 18.0 |
| Percent of Deliveries with Maternal Prenatal Smoking | | 15.9% | 14.9% |

During 2009/2010 to 2011/2012, Bow Valley Primary Care Network 's birth rate of 30.8 per 1,000 women was similar to the provincial PCN rate, and the teen birth rate of 31.2 per 1,000 was higher than Alberta's PCN teen birth rate. In addition, a similar proportion of prenatal smoking cases were reported compared to the province (15.9% vs. 14.9% AB PCNs).

***Sources:***

*Alberta Hospital Discharge Abstract Database (DAD), Alberta Health*
*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health*
*Alberta Vital Statistics Births File*
*Primary Care Network (PCN) Patient Panel File, Alberta Health*

***Notes:***

[1] *See Appendix A for definition.*

[2] *Patient panel derived based on four-cut methodology. See Appendix A for details.*

[3] *Some PCNs do not have indicator values for this section due to the PCN being established after 2011/2012. See Appendix A for details.*

© 2015 Government of Alberta

# Primary Care Network: Bow Valley Primary Care Network

## INPATIENT SERVICE UTILIZATION

Table 5.1 describes inpatient separation[1] rates per 1,000 population for the PCN and Alberta PCNs patients accessing health facilities across all of Alberta. The rate of inpatient separations is the ratio between the total number of separations and the total panel population, for each year.

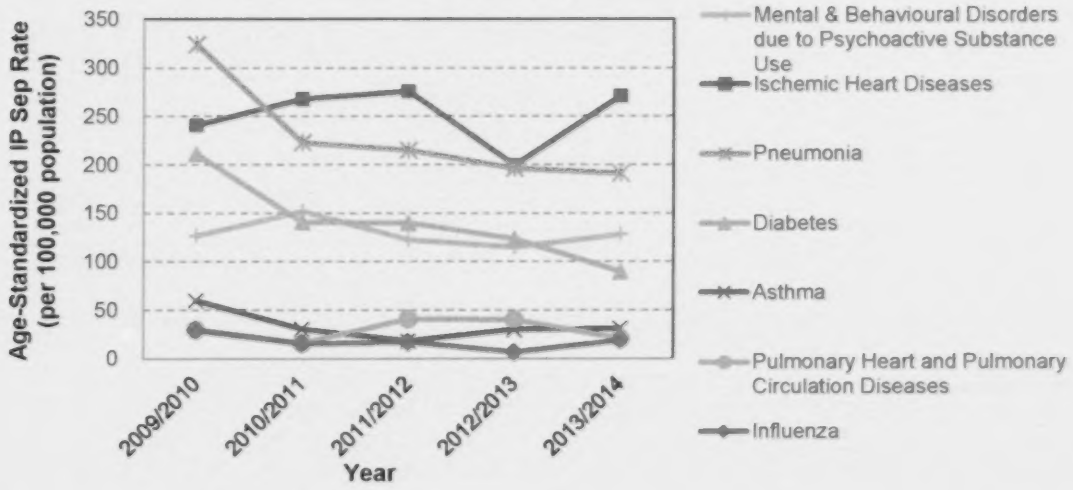
TABLE 5.1 Inpatient Separation Rates (per 1,000 population) for the PCN Panel[2] vs. Alberta PCNs Panel 2011/2012 - 2013/2014

| Inpatient Separation Rates (per 1,000 population)[3] | | |
|---|---|---|
| **Fiscal Years** | **Bow Valley Primary Care Network** | **Alberta PCNs** |
| 2011/2012 | 98.2 | 95.6 |
| 2012/2013 | 98.9 | 93.5 |
| 2013/2014 | 95.0 | 92.8 |

Bow Valley Primary Care Network 's inpatient separation rate for panel patients in this PCN varied between 95.0 in 2013/2014 and 98.9 in 2012/2013. In addition, in 2013/2014, the inpatient separation rate for patients in the Bow Valley Primary Care Network panel was similar to the provincial PCN rate (95.0 vs. 92.8 AB PCNs).

Figure 5.1 presents inpatient separation PCN panel rates for select health conditions (per 100,000 population), for the fiscal years 2009/2010 through 2011/2012. The rates have been standardized by age.

FIGURE 5.1 PCN Panel Age-Standardized[3,4] Inpatient Separation (IP Sep) Rates (per 100,000 population) For Selected Conditions, 2009/2010 - 2013/2014

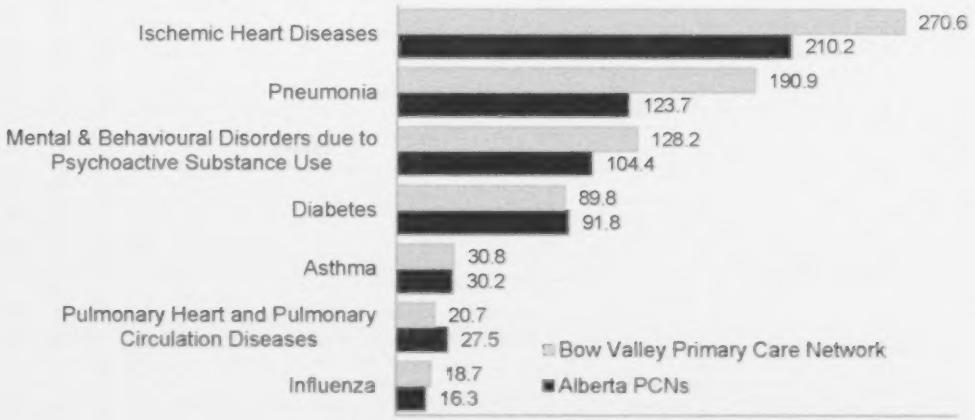



© 2015 Government of Alberta

On average, the highest inpatient separation rates, among select health conditions, reported in Bow Valley Primary Care Network during 2009/2010 to 2013/2014 were due to ischemic heart diseases. These rates reached a high of 275.4 per 100,000 population in 2011/2012 and a low of 199.0 per 100,000 population in 2012/2013.

Figure 5.2 presents inpatient separation rates per 100,000 population for panel patients in the PCN, compared to provincial PCN rates, for the most recent fiscal year and select health conditions.

FIGURE 5.2 PCN Panel versus Alberta PCNs Age-Standardized IP Sep Rates (per 100,000 population) For Select Conditions, 2013/2014




In 2013/2014, the three highest inpatient separation rates were reported for ischemic heart diseases, pneumonia, and mental & behavioural disorders due to psychoactive substance use.The most common reason for inpatient separations in Bow Valley Primary Care Network panel was ischemic heart diseases, which had a much higher rate compared to the provincial PCN rate per 100,000 population (270.6 vs. 210.2 AB PCNs). Additionally, Bow Valley Primary Care Network 's inpatient separation rates were higher than the provincial rates for 5 of the 7 diagnoses.

***Sources:***

*Alberta Hospital Discharge Abstract Database (DAD), Alberta Health*

*Alberta Health Care Insurance Plan (AHCIP) Quarterly Population Registry Files, Alberta Health*

*Primary Care Network (PCN) Patient Panel File, Alberta Health*

*Census 1991 Population Data, Statistics Canada*

***Notes:*** [1] *See Appendix A for definition.*

[2] *Patient panel derived based on four-cut methodology. See Appendix A for details.*

[3] *Population might be missing during early years due to some PCNs being established later on. See Appendix A for details.*

[4] *Age-standardized rates are adjusted using the direct method of standardization, with weights from Statistics Canada's 1991 census population.*

© 2015 Government of Alberta

# Definitions

Appendix A

### Age Standardization

Age standardization is a technique applied to make rates comparable across groups with different age distributions. A simple rate is defined as the number of people with a particular condition divided by the whole population. An age-standardized rate is defined as the number of people with a condition divided by the population within each age group. Standardizing (adjusting) the rate across age groups allows a more accurate comparison between populations that have different age structures. Age standardization is typically done when comparing rates across time periods, different geographic areas, and or population sub-groups (e.g. ethnic group).

### Birth Rate

The birth rate is the number of live births, of a given geographic area in a given year, per 1,000 population of the same geographic area in the same year. (Statistics Canada)

### Chronic Obstructive Pulmonary Disease (COPD)

The population aged 35 and over who reported being diagnosed by a health professional with chronic bronchitis, emphysema or COPD. (Statistics Canada, Canadian Community Health Survey)

COPD is a progressive disease that makes it hard to breathe. It can cause coughing that produces large amounts of mucus, wheezing, shortness of breath, chest tightness, and other symptoms. Cigarette smoking is the leading cause of COPD. Most people who have COPD smoke or used to smoke. Long-term exposure to other lung irritants (such as air pollution, chemical fumes, or dust) also may contribute to COPD.

### Fertility Rate

The fertility rate is the number of live births per 1,000 women of reproductive age (15 - 49 years) in a population per year. This is a more standardized way to measure fertility in a population than birth rate because it accounts for the percentage of women of reproductive age. (Statistics Canada)

### First Nations with Treaty Status

First Nation is a term that came into common usage in the 1970s to replace the word "Indian". Although the term First Nation is widely used, no legal definition of it exists. Among its uses, the term "First Nations people" refers to the Indian people in Canada, both Status and non-Status.

Starting in 1701, the British Crown entered into solemn treaties to encourage peaceful relationships between First Nations and non-Aboriginal people. Over the next several centuries, treaties were signed to define, among other things, the respective rights of Aboriginal people and governments to use and enjoy lands that Aboriginal people traditionally occupied. The Government of Canada and the courts understand treaties between the Crown and Aboriginal people to be solemn agreements

© 2015 Government of Alberta

that set out promises, obligations and benefits for both parties. (Aboriginal Affairs and Northern Development Canada)

### Four Cut Methodology

The Four Cut Funding Methodology is a way of assigning patients to one primary care provider in the province. All patients who have visited a family physician (or pediatrician or nurse practitioner in select circumstances) are assigned to a patient list for that physician. These patients are called enrollees. The application of the Four Cut Funding Methodology only permits patients or enrollees to be counted once even if they have seen multiple physicians.

A patient is added to the physician list in the following manner:

1. Single physician - A patient visiting a single physician is assigned to that physician.
2. Most visited physician – The remaining patients who have seen more than one physician are assigned to the physician they visited most frequently.
3. Physical exam – If the remaining patients have seen two physicians the same number of times, then they are assigned to the physician who completed the last physical exam.
4. Last physician – If the remaining patients have seen two physicians the same number of times and have not received a physical exam, then they are assigned to the physician who saw them last.

These patient enrollee lists are calculated twice a year – April 1 and October 1 – and payments based on the calculations are sent to each PCN. Each PCN also receives a report twice a year after the calculation and data run are completed, providing specific information on the PCN's population.

### High Birth Weight

Birth weight is the body weight of a baby at its birth. High birth weight is defined as live births with a weight of 4,500 grams or more, expressed as a percentage of all live births with known weight (Statistics Canada, Vital Statistics, Birth Database)

### Hospitalization Rate

The hospitalization rate is the age-standardized rate of acute care hospitalization, per 100,000 population. (Canadian Institute for Health Information)

### Inpatient

An inpatient is an individual who has been officially admitted to a hospital for the purpose of receiving one or more health services. (Canadian Institute for Health Information: MIS Standards 2011)

© 2015 Government of Alberta

### Inpatient Separations (Seps)

A separation from a health care facility occurs anytime a patient (or resident) leaves because of death, discharge, sign-out against medical advice, or transfer. The number of separations is the most commonly used measure of the utilization of hospital services. Separations, rather than admissions, are used because hospital abstracts for inpatient care are based on information gathered at the time of discharge.

### Inuit

Inuit are the Aboriginal people of Arctic Canada. As of Sept 2010, it is estimated that about 45,000 Inuit live in 53 communities in: Nunatsiavut (Labrador); Nunavik (Quebec); Nunavut; and the Inuvialuit Settlement Region of the Northwest Territories. Each of these four Inuit groups have settled land claims. These Inuit regions cover one-third of Canada's land mass. Please note that small numbers of Inuit people can be found in various other regions of Canada other than the four regions listed above.

The word "Inuit" means "the people" in the Inuit language called, Inuktitut and is the term by which Inuit refer to themselves. (Aboriginal Affairs and Northern Development Canada)

### Low Birth Weight

Birth weight is the body weight of a baby at its birth. Live births less than 5.5 pounds or 2500 grams at birth are considered as babies with low birth weight. Low birth weight is a key determinant of infant survival, health, and development. (Statistics Canada, Vital Statistics, Birth Database)

### Prevalence Rate

Prevalence is a measure of disease that allows us to determine a person's likelihood of having a disease. Therefore, the number of prevalent cases is the total number of cases of disease existing in a population. A prevalence rate is the total number of cases of a disease existing in a population divided by the total population. (http://www.health.ny.gov/diseases/chronic/basicstat.htm)

### Primary Care

Primary care is the first point of contact that people have with the health care system for medical needs requiring treatment and referral to other services as needed and is usually provided by a family physician or other health care professional.
(http://www.albertapci.ca/aboutpcns/primarycare/pages/default.aspx)

© 2015 Government of Alberta

### Primary Care Networks (PCN) Launch Year

The following PCNs were established after 2009/2010 which resulted in the data missing in some of the reported tables.

| PCN Name | Established in the Year |
|---|---|
| Lloydminster Primary Care Network | 2010/2011 |
| Wainwright Primary Care Network | 2010/2011 |
| Peaks to Prairies Primary Care Network | 2012/2013 |
| Drayton Valley Primary Care Network | 2013/2014 |
| Grande Cache Primary Care Network | 2013/2014 |

### Qualifier (comparisons between indicator values)

In comparing indicators across Primary Care Network (PCN) and the Provincial PCN, this report uses qualifiers such as 'higher than', 'lower than', 'similar to', etc. These statements are based on a simple statistical comparison that determines how far apart the indicator values are on the full scale of values for the indicator. For each indicator, the standard deviation (SD) was used as the measuring stick for whether the values are "close" or "far apart". For each indicator, the distance between the PCN value and the provincial (AB) PCN value was measured as number of SDs, and the direction of the difference (plus or minus). For example, if the PCN value is two SDs above the AB PCN value, then the PCN value is said to be 'much higher' than the provincial value. The complete set of comparison criteria is given below.

| Qualifier | Distance between values |
|---|---|
| Much Lower | below –1.5 SD |
| Lower | –1.5 SD *to* –0.25 SD |
| Similar/Comparable | –0.25 SD *to* +0.25 SD |
| Higher | +0.25 SD *to* +1.5 SD |
| Much Higher | +1.5 SD and higher |

### Separation Rate

A separation from a health care facility occurs anytime a patient (or resident) leaves because of death, discharge, sign-out against medical advice or transfer. The separation rate is the total number of inpatient separations divided by the total population.

### Teen Birth Rate

The teenage live birth rate is the number of live births per 1,000 women aged 15 to 19. (E-STAT, Statistics Canada)

© 2015 Government of Alberta

Appendix B

# Bow Valley Primary Care Network Panel Patient Distribution by Municipality

The following listing shows the distribution of the PCN patient panel population by municipality (top 30 municipalities for the most recently available five fiscal years. The population counts might be missing during early fiscal years due to some PCNs established later on in the 5 fiscal year period examined.

| MUNICIPALITY | 2009/2010 | 2010/2011 | 2011/2012 | 2012/2013 | 2013/2014 |
|---|---|---|---|---|---|
| CANMORE | 9,902 (41.7%) | 10,127 (41.7%) | 10,152 (40.7%) | 10,418 (39.7%) | 10,709 (40.0%) |
| BANFF | 6,108 (25.7%) | 6,143 (25.3%) | 6,571 (26.3%) | 6,857 (26.2%) | 7,035 (26.3%) |
| CALGARY | 2,418 (10.2%) | 2,573 (10.6%) | 2,684 (10.8%) | 2,908 (11.1%) | 2,897 (10.8%) |
| MORLEY | 1,760 (7.4%) | 1,807 (7.4%) | 1,913 (7.7%) | 2,026 (7.7%) | 2,115 (7.9%) |
| COCHRANE | 799 (3.4%) | 838 (3.5%) | 843 (3.4%) | 876 (3.3%) | 895 (3.3%) |
| EXSHAW | 408 (1.7%) | 401 (1.7%) | 389 (1.6%) | 372 (1.4%) | 410 (1.5%) |
| EDMONTON | 326 (1.4%) | 324 (1.3%) | 340 (1.4%) | 393 (1.5%) | 397 (1.5%) |
| LAKE LOUISE | 263 (1.1%) | 258 (1.1%) | 275 (1.1%) | 341 (1.3%) | 317 (1.2%) |
| KANANASKIS | 206 (0.9%) | 193 (0.8%) | 193 (0.8%) | 202 (0.8%) | 195 (0.7%) |
| HARVIE HEIGHTS | 105 (0.4%) | 108 (0.4%) | 119 (0.5%) | 117 (0.4%) | 99 (0.4%) |
| RED DEER | 66 (0.3%) | 67 (0.3%) | 83 (0.3%) | 121 (0.5%) | 91 (0.3%) |
| BRAGG CREEK | 56 (0.2%) | 57 (0.2%) | 75 (0.3%) | 90 (0.3%) | 79 (0.3%) |
| FORT MCMURRAY | 33 (0.1%) | 41 (0.2%) | 61 (0.2%) | 80 (0.3%) | 73 (0.3%) |
| LAC DES ARCS | 70 (0.3%) | 67 (0.3%) | 72 (0.3%) | 68 (0.3%) | 67 (0.3%) |
| OKOTOKS | 24 (0.1%) | 28 (0.1%) | 34 (0.1%) | 61 (0.2%) | 65 (0.2%) |
| AIRDRIE | 39 (0.2%) | 33 (0.1%) | 44 (0.2%) | 56 (0.2%) | 62 (0.2%) |
| DEAD MAN'S FLATS | 37 (0.2%) | 35 (0.1%) | 37 (0.1%) | 46 (0.2%) | 54 (0.2%) |
| LETHBRIDGE | 33 (0.1%) | 26 (0.1%) | 30 (0.1%) | 50 (0.2%) | 49 (0.2%) |
| GRANDE PRAIRIE | 24 (0.1%) | 23 (0.1%) | 40 (0.2%) | 42 (0.2%) | 44 (0.2%) |

© 2015 Government of Alberta

| MUNICIPALITY | 2009/2010 | 2010/2011 | 2011/2012 | 2012/2013 | 2013/2014 |
|---|---|---|---|---|---|
| SHERWOOD PARK | 30 (0.1%) | 37 (0.2%) | 42 (0.2%) | 40 (0.2%) | 44 (0.2%) |
| HIGH LEVEL | 62 (0.3%) | 82 (0.3%) | 48 (0.2%) | 22 (0.1%) | 42 (0.2%) |
| WETASKIWIN | 9 (0.0%) | 14 (0.1%) | 13 (0.1%) | 14 (0.1%) | 41 (0.2%) |
| JASPER | 32 (0.1%) | 35 (0.1%) | 33 (0.1%) | 50 (0.2%) | 39 (0.1%) |
| MEDICINE HAT | 37 (0.2%) | 29 (0.1%) | 34 (0.1%) | 43 (0.2%) | 39 (0.1%) |
| PINCHER CREEK | 4 (0.0%) | 11 (0.0%) | 16 (0.1%) | 36 (0.1%) | 39 (0.1%) |
| HIGH RIVER | 23 (0.1%) | 17 (0.1%) | 18 (0.1%) | 39 (0.1%) | 31 (0.1%) |
| ST. ALBERT | 34 (0.1%) | 32 (0.1%) | 32 (0.1%) | 31 (0.1%) | 29 (0.1%) |
| MASKWACIS | 11 (0.0%) | 10 (0.0%) | 10 (0.0%) | 9 (0.0%) | 27 (0.1%) |
| LEDUC | 15 (0.1%) | 13 (0.1%) | 12 (0.0%) | 12 (0.0%) | 21 (0.1%) |
| CAMROSE | 7 (0.0%) | 11 (0.0%) | 12 (0.0%) | 11 (0.0%) | 20 (0.1%) |
| ALL OTHER MUNICIPALITIES | 824 (3.5%) | 824 (3.4%) | 724 (2.9%) | 787 (3.0%) | 771 (2.9%) |
| **TOTAL PCN POPULATION** | 23,765 (100.0%) | 24,264 (100.0%) | 24,949 (100.0%) | 26,218 (100.0%) | 26,726 (100.0%) |

***Sources:***

*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health*

*Primary Care Network (PCN) Patient Panel File, Alberta Health*

© 2015 Government of Alberta